

WHAT IS CLAIMED IS

1. A screening method for a prophylactic or therapeutic substance for a disease associated with a protein comprising
5 the same or substantially the same amino acid sequence as the amino acid sequence shown by SEQ ID NO:2 or a salt thereof, which comprises using said protein or a partial peptide thereof or a salt thereof.
- 10 2. A screening method for a prophylactic or therapeutic substance for a disease associated with a protein comprising the amino acid sequence shown by SEQ ID NO:2 or a salt thereof, which comprises using said protein or a partial peptide thereof or a salt thereof.
- 15 3. The screening method of claim 1, wherein the disease is diabetes or a renal disease.
4. The screening method of claim 1, wherein the disease is
20 diabetic nephropathy.
5. The screening method of claim 1, which comprises cultivating a cell having an ability to produce a protein comprising the same or substantially the same amino acid
25 sequence as the amino acid sequence shown by SEQ ID NO:2 or a partial peptide thereof or a salt thereof in the presence and absence of a test substance, and comparing the amounts of said protein or a partial peptide thereof or a salt thereof produced under the two conditions.
- 30 6. A screening kit for a prophylactic or therapeutic substance for a disease associated with a protein comprising the same or substantially the same amino acid sequence as the amino acid sequence shown by SEQ ID NO:2 or a salt thereof, which

includes (a) a cell having an ability to produce said protein or a partial peptide thereof or a salt thereof, and (b) a substance selected from the group consisting of an antibody against said protein or a partial peptide thereof or a salt thereof, a polynucleotide to which said protein or a partial peptide thereof or a salt thereof can bind, and a transcription regulatory factor capable of interacting with said protein or a partial peptide thereof or a salt thereof.

7. The screening method of claim 1, which comprises comparing the activities of a protein comprising the same or substantially the same amino acid sequence as the amino acid sequence shown by SEQ ID NO:2 or a partial peptide thereof or a salt thereof in the presence and absence of a test substance.

15

8. A screening kit for a prophylactic or therapeutic substance for a disease associated with a protein comprising the same or substantially the same amino acid sequence as the amino acid sequence shown by SEQ ID NO:2 or a salt thereof, which includes (a) said protein or a partial peptide thereof or a salt thereof, and (b) a polynucleotide to which said protein or a partial peptide thereof or a salt thereof can bind or a transcription regulatory factor capable of interacting with said protein or a partial peptide thereof or a salt thereof.

25

9 The screening method of claim 7, which comprises cultivating a cell containing a gene whose expression is controlled by a protein comprising the same or substantially the same amino acid sequence as the amino acid sequence shown by SEQ ID NO:2 or a partial peptide thereof or a salt thereof with said protein or a partial peptide thereof or a salt thereof in the presence and absence of a test substance, and comparing the expressions of said gene under the two conditions.

10. A screening kit for a prophylactic or therapeutic substance for a disease associated with a protein comprising the same or substantially the same amino acid sequence as the amino acid sequence shown by SEQ ID NO:2 or a salt thereof,
5 which includes (a) a cell containing a gene whose expression is controlled by said protein or a partial peptide thereof or a salt thereof, (b) said protein or a partial peptide thereof or a salt thereof, and (c) a polynucleotide capable of hybridizing to said gene under highly stringent conditions.

10

11. The screening method of claim 7, which comprises cultivating a cell having an ability to produce a protein comprising the same or substantially the same amino acid sequence as the amino acid sequence shown by SEQ ID NO:2 or a
15 partial peptide thereof or a salt thereof in the presence and absence of a test substance, and comparing the activities of said protein or a partial peptide thereof or a salt thereof under the two conditions.

20 12. A screening kit for a prophylactic or therapeutic substance for a disease associated with a protein comprising the same or substantially the same amino acid sequence as the amino acid sequence shown by SEQ ID NO:2 or a salt thereof, which includes (a) a cell having an ability to produce said
25 protein or a partial peptide thereof or a salt thereof, and (b) a polynucleotide capable of hybridizing to a gene whose expression is controlled by said protein or a partial peptide thereof or a salt thereof under highly stringent conditions.

30 13. A screening method for a prophylactic or therapeutic substance for a disease associated with a protein comprising the same or substantially the same amino acid sequence as the amino acid sequence shown by SEQ ID NO:2 or a salt thereof, which comprises using a polynucleotide comprising the base

sequence that encodes said protein or a partial peptide thereof.

14. A screening method for a prophylactic or therapeutic
5 substance for a disease associated with a protein comprising the amino acid sequence shown by SEQ ID NO:2 or a salt thereof, which comprises using a polynucleotide comprising the base sequence that encodes said protein or a partial peptide thereof.

10

15. The screening method of claim 14, wherein the polynucleotide comprises the entire or a portion of the base sequence shown by SEQ ID NO:1.

16. The screening method of claim 14, wherein the disease is diabetes or a renal disease.

17. The screening method of claim 14, wherein the disease is diabetic nephropathy.

20

18. The screening method of claim 14, which comprises cultivating a cell having an ability to produce a protein comprising the same or substantially the same amino acid sequence as the amino acid sequence shown by SEQ ID NO:2 or a
25 partial peptide thereof or a salt thereof in the presence and absence of a test substance, and comparing the amounts of mRNA that encodes said protein or a partial peptide thereof under the two conditions.

30 19. A screening kit for a prophylactic or therapeutic substance for a disease associated with a protein comprising the same or substantially the same amino acid sequence as the amino acid sequence shown by SEQ ID NO:2 or a salt thereof, which includes (a) a cell having an ability to produce said

protein or a partial peptide thereof or a salt thereof, and
(b) a polynucleotide capable of hybridizing to mRNA that
encodes said protein or a partial peptide thereof under highly
stringent conditions.

5

20. A prophylactic or therapeutic agent for a disease
associated with a protein comprising the same or substantially
the same amino acid sequence as the amino acid sequence shown
by SEQ ID NO:2 or a salt thereof, which contains an antibody
10 against said protein or a partial peptide thereof or a salt
thereof.

15

21. The prophylactic or therapeutic agent of claim 20, wherein
the disease is diabetes or a renal disease.

22. The prophylactic or therapeutic agent of claim 20, wherein
the disease is diabetic nephropathy.

23. A prophylactic or therapeutic agent for a disease
20 associated with a protein comprising the same or substantially
the same amino acid sequence as the amino acid sequence shown
by SEQ ID NO:2 or a salt thereof, which contains a
polynucleotide having a base sequence complementary to the
base sequence that encodes said protein or a partial peptide
25 thereof.

24. The prophylactic or therapeutic agent of claim 23, wherein
the disease is diabetes or a renal disease.

30 25. The prophylactic or therapeutic agent of claim 23, wherein
the disease is diabetic nephropathy.

26. A diagnostic reagent for a disease associated with a
protein comprising the same or substantially the same amino

acid sequence as the amino acid sequence shown by SEQ ID NO:2 or a salt thereof, which contains an antibody against said protein or a partial peptide thereof or a salt thereof.

5 27. The diagnostic reagent of claim 26, wherein the disease is diabetes or a renal disease.

28. The diagnostic reagent of claim 26, wherein the disease is diabetic nephropathy.

10

29. A diagnostic reagent for a disease associated with a protein comprising the same or substantially the same amino acid sequence as the amino acid sequence shown by SEQ ID NO:2 or a salt thereof, which contains a polynucleotide comprising
15 the base sequence that encodes said protein or a partial peptide thereof.

30. The diagnostic reagent of claim 29, wherein the disease is diabetes or a renal disease.

20

31. The diagnostic reagent of claim 29, wherein the disease is diabetic nephropathy.

32. A prophylactic or therapeutic agent for diabetes or a
25 renal disease, which contains a TSC-22 suppressant.

33. The prophylactic or therapeutic agent of claim 32, wherein the renal disease is diabetic nephropathy.

30 34. A prophylactic or therapeutic method for diabetes or a renal disease in a mammal, which comprises administering a TSC-22 suppressant to said mammal.

35. The method of claim 34, wherein the renal disease is

diabetic nephropathy.

36. Use of a TSC-22 suppressant for the production of a
prophylactic or therapeutic agent for diabetes or a renal
5 disease.

37. The use of claim 36, wherein the renal disease is diabetic
nephropathy.

10